(5) Flight plan.

(b) If a flight originates at the certificate holder's principal base of operations, it shall retain at that base a signed copy of each document listed in paragraph (a) of this section.

(c) Except as provided in paragraph (d) of this section, if a flight originates at a place other than the certificate holder's principal base of operations, the pilot in command (or another person not aboard the airplane who is authorized by the certificate holder) shall, before or immediately after departure of the flight, mail signed copies of the documents listed in paragraph (a) of this section, to the principal base of operations.

(d) If a flight originates at a place other than the certificate holder's principal base of operations, and there is at that place a person to manage the flight departure for the certificate holder who does not himself or herself depart on the airplane, signed copies of the documents listed in paragraph (a) of this section may be retained at that place for not more than 30 days before being sent to the certificate holder's principal base of operations. However, the documents for a particular flight need not be further retained at that place or be sent to the principal base of operations, if the originals or other copies of them have been previously returned to the principal base of operations.

(e) The certificate holder conducting supplemental operations shall:

(1) Identify in its operations manual the person having custody of the copies of documents retained in accordance with paragraph (d) of this section; and

(2) Retain at its principal base of operations either an original or a copy of the records required by this section for at least three months.

[Doc. No. 6258, 29 FR 19226, Dec. 31, 1964, as amended by Amdt. 121–123, 40 FR 44541, Sept. 29, 1975; Amdt. 121–143, 43 FR 22642, May 25, 1978; Amdt. 121–178, 47 FR 13316, Mar. 29, 1982; Amdt. 121–253, 61 FR 2616, Jan. 26, 1996]

§§ 121.698–121.699 [Reserved]

§ 121.701 Maintenance log: Aircraft.

(a) Each person who takes action in the case of a reported or observed failure or malfunction of an airframe, engine, propeller, or appliance that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log.

(b) Each certificate holder shall have an approved procedure for keeping adequate copies of the record required in paragraph (a) of this section in the airplane in a place readily accessible to each flight crewmember and shall put that procedure in the certificate holder's manual.

§ 121.703 Mechanical reliability reports.

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by a related fire-warning system;

(3) False fire warning during flight;

(4) An engine exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight because of flameout;

(7) Engine shutdown during flight when external damage to the engine or airplane structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Engine shutdown during flight of more than one engine;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction, or an unwanted opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the airplane is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA;

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut down an engine); and

(17) Emergency evacuation systems or components including all exit doors, passenger emergency evacuation lighting systems, or evacuation equipment that are found defective, or that fail to perform the intended functions during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments.

(b) For the purpose of this section *during flight* means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft that occurs or is detected at any time if, in its opinion, that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft used by it.

(d) Each certificate holder shall send each report required by this section, in writing, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to the certificate–holding district office. Each report of occurrences during a 24-hour period must be mailed or delivered to that office within the next 72 hours. However, a report that is due on Saturday or Sunday may be mailed or delivered on the following Monday, and one that is due on a holiday may be mailed or delivered on the next work day.

(e) The certificate holder shall transmit the reports required by this section in a manner and on a form that is convenient to its system of communication and procedure, and shall include in the first daily report as much of the following as is available:

(1) Type and identification number of the aircraft.

(2) The name of the operator.

(3) The date, flight number, and stage during which the incident occurred (e.g., preflight, takeoff, climb, cruise, desent landing, and inspection).

(4) The emergency procedure effected (e.g., unscheduled landing and emergency descent).

(5) The nature of the failure, malfunction, or defect.

(6) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since overhaul.

(7) Apparent cause of the failure, malfunction, or defect (e.g., wear, crack, design deficiency, or personnel error).

(8) Whether the part was repaired, replaced, sent to the manufacturer, or other action taken.

(9) Whether the aircraft was grounded.

(10) Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) A certificate holder that is also the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a type certificate holder, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under §21.3 of this chapter or under the accident reporting provisions of 14 CFR part 830.

(g) No person may withhold a report required by this section even though all information required in this section is not available.

(h) When certificate holder gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

[Doc. No. 6258, 29 FR 19226, Dec. 31, 1964, as amended by Doc. No. 8084, 32 FR 5770, Apr. 11, 1967; Amdt. 121–72, 35 FR 18188, Nov. 28, 1970; Amdt. 121–143, 43 FR 22642, May 25, 1978; Amdt. 121–178, 47 FR 13316, Mar. 29, 1982; Amdt. 121–187, 50 FR 32375, Aug. 9, 1985; Amdt. 121–195, 53 FR 8728, Mar. 16, 1988; Amdt. 121–251, 60 FR 65936, Dec. 20, 1995]

EFFECTIVE DATE NOTE: By Amdt. 121–279, 65 FR 56201, Sept. 15, 2000, §121.703 was amended by revising the section heading and paragraphs (a), (c), (d), (e), and (f); redesignating paragraphs (g) and (h) as paragraphs (h) and (i) respectively; revising newly redesignated paragraph (i); and by adding a new paragraph (g), effective Jan. 16, 2001. At 65 FR 80743, Dec. 22, 2000, the effective date was delayed until July 16, 2001. For the convenience of the user, the added and revised text is set forth as follows:

§ 121.703 Service difficulty reports (operational).

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect concerning—

(1) Any fire and, when monitored by a related fire-warning system, whether the fire-warning system functioned properly;

(2) Any false warning of fire or smoke;

(3) An engine exhaust system that causes damage to the engine, adjacent structure, equipment, or components;

(4) An aircraft component that causes the accumulation or circulation of smoke, vapor, or toxic or noxious fumes;

(5) Any engine flameout or shutdown during flight or ground operations;

(6) A propeller feathering system or ability of the system to control overspeed;

(7) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage;

(8) A landing gear extension or retraction, or the opening or closing of landing gear doors during flight;

(9) Any brake system component that results in any detectable loss of brake actuating force when the aircraft is in motion on the ground;

(10) Any aircraft component or system that results in a rejected takeoff after initiation of the takeoff roll or the taking of emergency actions, as defined by the Aircraft Flight Manual or Pilot's Operating Handbook;

(11) Any emergency evacuation system or component including any exit door, passenger emergency evacuation lighting system, or evacuation equipment found to be defective or that fails to perform the intended function during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments; and

(12) Autothrottle, autoflight, or flight control systems or components of these systems.

* * * * *

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, system, component, or powerplant that occurs or is detected at any time if that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft.

(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(e) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

(1) The manufacturer, model, and serial number of the aircraft, engine, or propeller;

(2) The registration number of the aircraft;

(3) The operator designator;

(4) The date on which the failure, malfunction, or defect was discovered;

(5) The stage of flight or ground operation during which the failure, malfunction, or defect was discovered;

(6) The nature of the failure, malfunction, or defect;

(7) The applicable Joint Aircraft System/Component Code;

(8) The total cycles, if applicable, and total time of the aircraft, aircraft engine, propeller, or component;

(9) The manufacturer, manufacturer part number, part name, serial number, and location of the component that failed, malfunctioned, or was defective, if applicable;

(10) The manufacturer, manufacturer part number, part name, serial number, and location of the part that failed, malfunctioned, or was defective, if applicable;

(11) The precautionary or emergency action taken;

(12) Other information necessary for a more complete analysis of the cause of the failure, malfunction, or defect, including available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(13) A unique control number for the occurrence, in a form acceptable to the Administrator.

(f) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not

report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(g) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by a part 121 certificate holder. However, the part 121 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 121 certificate holder shall receive a copy of each report submitted by the repair station.

(h) No person may withhold a report required by this section although all information required by this section is not available.

(i) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

§121.704 Service difficulty reports (structural).

(a) Each certificate holder shall report the occurrence or detection of each failure or defect related to—

(1) Corrosion, cracks, or disbonding that requires replacement of the affected part;

(2) Corrosion, cracks, or disbonding that requires rework or blendout because the corrosion, cracks, or disbonding exceeds the manufacturer's established allowable damage limits;

(3) Cracks, fractures, or disbonding in a composite structure that the equipment manufacturer has designated as a primary structure or a principal structural element; or

(4) Repairs made in accordance with approved data not contained in the manufacturer's maintenance manual.

(b) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure or defect in aircraft structure that occurs or is detected at any time if that failure or defect has endangered or may endanger the safe operation of an aircraft.

(c) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(d) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

(1) The manufacturer, model, serial number, and registration number of the aircraft;

(2) The operator designator;

(3) The date on which the failure or defect was discovered;

(4) The stage of ground operation during which the failure or defect was discovered;

(5) The part name, part condition, and location of the failure or defect;

(6) The applicable Joint Aircraft System/Component Code;

(7) The total cycles, if applicable, and total time of the aircraft;

(8) Other information necessary for a more complete analysis of the cause of the failure or defect, including corrosion classification, if applicable, or crack length and available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(9) A unique control number for the occurrence, in a form acceptable to the Administrator.

(e) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure or defect under this section if the failure or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.